

REMARKS

The indication that claims 4 and 29 include patentable subject matter is acknowledged with thanks.

Claims 1-3, 5-11, 15-20, 24-28, and 30-37 were rejected as anticipated by MILLAR et al. 5,453,873. Reconsideration and withdrawal of the rejection are respectfully requested.

Claim 1 includes, among other features, a first excitation generator and a second excitation generator. MILLAR et al. disclose an optical amplifier that has but one excitation generator. This generator is either a 801 nm pump or a 971 nm pump, not both. See, for example, figures 2 and 3 and the discussion at column 3 beginning at line 30. MILLAR et al. state that two "alternative" (not cumulative) excitation schemes can be employed. At no point does MILLAR et al. disclose or suggest a device with two excitation generators. Accordingly, claim 1 avoids the rejection under §102.

It is also noted that the laser upper level and laser lower level disclosed in MILLAR et al. do not meet claim limitations. Claim 1 provides that the laser lower level is higher than the ground level. By contrast, MILLAR et al. disclose a laser that has a lower level at (not higher than) ground level. See, for example, Figure 1 that shows the green emission having a lower level at ground $^4I_{15/2}$, and the discussion at column 3, lines 29-30 that states that the upper level is at $^4S_{3/2}$ and the lower level is at the $^4I_{15/2}$ ground state (also stated

at column 1, line 64). The Official Action identifies the laser upper level as $^4I_{9/2}$ and the laser lower level is at the $^4I_{13/2}$; there is no support for this assertion in the reference. Accordingly, claim 1 further avoids the rejection under §102.

Claims dependent from claim 1 are further allowable. For example, claim 9 recites specific levels for the laser upper and lower levels and for the excited state absorption upper and lower levels, which are clearly not disclosed in the reference. The Official Action identifies sets of upper and lower levels for rejecting claim 1 that do not meet the limitations of claim 9. The specific wavelengths of claims 10-11 are also not found in the reference (they each include a second excitation generator at 780-790 nm), even if one erroneously considers the reference to disclose two excitation generators at 801 and 971 nm. Claim 15 includes a gain enhancement generator that is not disclosed in the reference or discussed in the Official Action.

Claims 17 and 26 and claims dependent therefrom are allowable for the same reasons as given above.

Claims 12-14 and 21-23 were rejected as unpatentable over MILLAR et al. in view of KASAMATSU 6,411,432. Reconsideration and withdrawal of the rejection are respectfully requested for the reasons given above.

The two references relied upon in the Official Action do not appear on the PTO-892 provided with the Official Action.

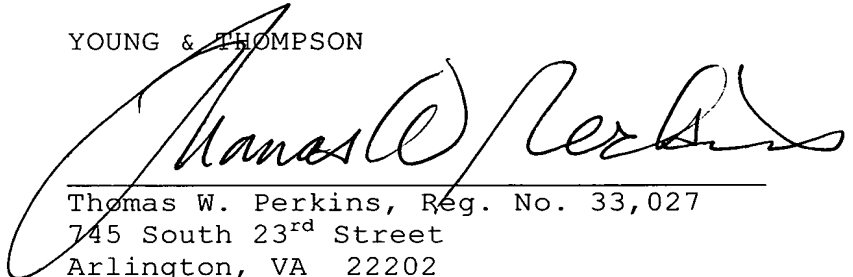
A further PTO-892 identifying both MILLAR et al. and KASAMATSU is respectfully requested.

In view of the foregoing remarks, it is believed that the present application is in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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